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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,715	11/13/2000	Tapio Mantysalo	413-009920-US(PAR)	7683

7590

06/19/2003

Clarence A Green
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EXAMINER

GRIER, LAURA A

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 06/19/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/711,715

Applicant(s)

MANTYSALO ET AL.

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 4-9 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 446.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers, for application no. 20000569 dated 03/10/2000, submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on 06/02/2000. It is noted, however, that applicant has not filed a certified copy of the 20001327 application as required by 35 U.S.C. 119(b).

Even though, two applications are in the file, both have the same filing date. Please provide the correct documents.

Specification

3. The disclosure is objected to because of the following informalities: the abstract page – “Fig. 3”, should be removed.

Appropriate correction is required.

Claim Objections

4. **Claim 8** is objected to because of the following informalities: line 3, recites, “the same circuit board”. There is insufficient antecedent basis. Appropriate correction is required.

5. **Claim 9** is objected to because of the following informalities: line 2, recites, "*said electronic structure parts* are inside *the same integrated circuit (IC)*". There is insufficient antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. **Claims 12 and 13** are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an electro-static discharge protector, does not reasonably provide enablement for the electro-static discharge protector being a polymer component (claim 12) or a feed-through component (claim 13). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The applicant's disclosure fails to disclose or direct any indication of the type of material or make-up of the electro-static discharge protector in order to claim such components as part of the invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, line 2, recites "close by this". It is unclear as to what the applicant is inferring in respect to the proximity of the protector to the microphone capsule. Thus, the claim language/limitation is indefinite, undefined and unclear.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

The applicant's admitted prior art (herein, AAPA) discloses a microphone structure comprising a microphone capsule (figure 1 and page 1, lines 18-36 and page 2, lines 1-23) with 1st and 2nd output contacts, a converting means (page 1, lines 18-24); and amplifier (Q1) with a 1st and 2nd output conductor; a 1st capacitor (C11) positioned between the two conductor outputs, which reads on a 1st capacitor; coupled to an electro-static discharge protector (VDR1) to the contacts of the microphone capsule. Even though, AAPA discloses that a resistor (R11 – impedance) may be added (in series) to lessen capacitive coupling, AAPA fails to specifically disclose a 1st impedance within the microphone capsule. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by providing an impedance resistor such as resistor R11 into the circuitry provided within

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the microphone capsule, since it has been affirmed that the use of one structure instead of a structure of multiple parts as that disclosed by the AAPA would be merely a matter obviousness to one skilled in the art of microphone structure and function. *In re Larson*, 144 USPQ, 347 349 (CCPA 1965).

Regarding **claim 2**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 1). AAPA fails to specifically disclose the electro-static discharge protector within the microphone capsule. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA by providing an electro-static discharge protector into the circuitry provided within the microphone capsule, since it has been affirmed that the use of one structure instead of a structure of multiple parts as that disclosed by the AAPA would be merely a matter obviousness to one skilled in the art of microphone structure and function. *In re Larson*, 144 USPQ, 347 349 (CCPA 1965).

Regarding **claim 3**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 1). AAPA further discloses the electro-static discharge protector outside of the microphone capsule (figure 1, VDR1) in close proximity.

Regarding **claim 8**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 2). AAPA further discloses that components are comprised on the same circuit or circuit board (page 2, lines 5-6).

Regarding **claim 10**, AAPA and *In re Larson* discloses everything claimed as applied above (see claim 1). AAPA further discloses the electro-static discharge protector (VDR1) as being a varistor (page 2, lines 13-14).

Regarding **claim 10**, AAPA and In re Larson discloses everything claimed as applied above (see claim 1). AAPA and In re Larson fails to specifically disclose the electro-static discharge protector (VDR1) as a semiconductor (ZD). The examiner takes official notice that a Zener diode, which a semiconductor device/component was well known. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA and In re Larson by providing a Zener diode as eletro-static discharge protector for the purpose of reducing noise problems or the like that may produced by components on a circuit board, wherein the Zener diode is a common component of a conventional ESD protection circuit.

Claims 4-7, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

Or faxed to:

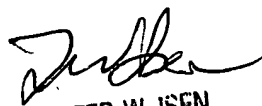
(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG 

June 14, 2003


FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600